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Series of photographs of the Moon and *Jupiter* (negatives and enlargements on glass), presented by the Lick Observatory; two photographs of the Moon, taken at the Royal Observatory, Greenwich, presented by the Astronomer Royal; Lantern slide of the nebula in *Orion*, presented by Mr. Wilson; Photographs of a meteor track, presented by Professor Barnard.

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## *Address to Her Majesty the Queen on the completion of the Sixtieth Year of Her Reign.*

The following is the text of the Address to Her Majesty which was received on Her behalf by H.R.H. the Prince of Wales, at St. James's Palace, on 1897 July 21:—

"TO THE QUEEN'S MOST EXCELLENT MAJESTY.

"May it please your Majesty,—We, the President, Council, and Fellows of the Royal Astronomical Society, humbly beg to approach Your Majesty with the tender of our sincere and respectful congratulations on the happy completion of the sixtieth year of Your Majesty's most auspicious reign.

"Sixty years ago Your Majesty was graciously pleased to become the Patron of our Society. In approaching Your Majesty on that occasion our Society ventured to express the hope that Your Majesty's reign 'would be distinguished for the advancement of Astronomy, as well as of every other branch of Science, and for the enjoyment, under Divine Providence, of every earthly blessing.'

"When we see how abundantly these loyal wishes have already been fulfilled, we desire to express our deep appreciation of the interest and sympathy that Your Majesty has always manifested in the intellectual well-being of Your subjects; and on behalf of all those within the wide limits of Your Majesty's

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Empire who are interested in the development of Astronomy we gratefully acknowledge the benefits we have enjoyed during the long continuance of Your Majesty's reign, and pray that for many years Your Majesty may be spared to rule over us."

The Address was presented by the President (Sir R. S. Ball) and one of the Secretaries (Professor H. H. Turner), and the following reply was handed to the President :—

"On behalf of the Queen, my dear Mother, I thank you for your loyal and dutiful Address and for the affectionate congratulations which you tender on the completion of the sixtieth year of Her reign.

"It is a source of profound joy to the Queen to receive the expressions of devotion to Her person and family which are offered by Her subjects throughout the Empire. She is gladdened by the thought that the sixty years of Her reign have been years of progress in knowledge and of increase in prosperity ; and She prays that, by the blessing of Almighty God, She may always live in the hearts of Her loving and beloved people."

The President has since received the Jubilee Medal from Her Majesty.

## *Note on a result concerning Diffraction Phenomena used by Professor Wadsworth in several recently published papers.*

By H. F. Newall, M.A.

Professor Wadsworth has recently published in a great number of journals (*Observatory*, *Knowledge*, *Astrophysical Journal*, *Monthly Notices of R.A.S.*, *Astronomische Nachrichten*) remarks concerning the performance of various lenses with respect to photographic delineation of faint nebulæ, &c. Underlying these remarks is a misinterpretation of a result obtained by Stokes in 1853, and it seems desirable to point out the error.

Stokes gave (*Trans. R.S. Edin.* xx. 1853) a general analytical verification of a result obtained for certain special cases by Kelland (*Trans. R.S. Edin.* xv.). These results were reached by Kelland in a comparison of the total quantity of light coming from a distant point and falling on an object glass, with the total quantity of light in the resulting diffraction pattern, which forms the image of the distant point. It was at that time a question whether any of the energy was lost as *light*, or whether light was simply transferred from dark rings in the diffraction pattern and piled up in the bright rings without any loss.

Stokes and Kelland showed that the total quantity of light in the diffraction pattern $\Big($viz. $\int_{-\infty}^{+\infty}\int_{-\infty}^{+\infty} \mathrm{I}\, d\,\xi\, d\,\eta$ in the usual

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